**Crater Lake National Park** 



### Weather



Weather May Be Unpredictable - and a Source of Great Beauty Weather plays a dramatic role at Crater Lake National Park. Winter, especially, shapes the landscape; snow generally begins to accumulate each year in October and doesn't melt in most places until the following June. Summer weather is more predictable, with warm, dry days, blue skies, and cool nights. Nevertheless, there may be days even in August when the lake is completely obscured by clouds and fog. Visitors to Crater Lake National Park should be prepared for any kind of weather, any time of the year.

#### **Summer Conditions**

The weather in **May and June** can vary from warm and sunny to snowy and foggy with poor lake visibility. Temperatures may be as high as 65°F (18°C) or as low as freezing.

**July, August, and September** are your "best bets" for dry, warmer weather. A typical daytime high temperature during these three months is around 67°F (19°C), but can range from 40°F to 80°F or more (4°C to 27°C). Temperatures cool off rapidly in the evening, with a typical nighttime low around

40°F (4°C), while some nights dip below freezing.

October usually presents cool but sunny days and brings the start of winter snowfall by mid-month.

Summer thunderstorms occur from June through mid-September, bringing dramatic displays of lightning and high winds. Boat tours, guided walks, and evening programs may be canceled if lightning is present in the park.

#### Winter Conditions

From October to June, Crater Lake National Park is a snow-covered wilderness. November through April is assuredly snowy with poor visibility and fair to poor driving conditions, but wonderful skiing and snowshoeing opportunities. With snowfall still lingering on the ground in early July, winter defines Crater Lake National Park more than any other season.

Snowfall averages 528 inches (1,341 cm) annually, and by early spring, it is typical to have ten to fifteen feet (4 meters) of snow on the ground. While snowfall is common in the Cascade Mountains, Crater Lake National Park is one of the snowiest areas in the Northwest where regular records are kept.

The National Park Service began recording weather information at Crater Lake National Park headquarters in 1926. The winter of 1932-1933 still holds the record for total snowfall in a single season, with 879 inches (2,230 cm). In 1950, Crater Lake set a state record for snowfall in a single calendar year, with 903 inches (2,294 cm). The most snow ever recorded on the ground at Park Headquarters was 21 feet (6.4 meters), on April 3, 1983.

Typical winter temperatures range from a high of about 35°F (2°C) to an overnight low around 19°F (-7°C).

#### **Weather Statistics**

Crater Lake National Park Weather Statistics National Weather Service records 1930-2000

	Maximum	Minimum	Rainfall	Snowfall	Snowdepth
Month	Temp (°F)	Temp (°F)	(inches)	(inches)	(inches)
January	34	18	10.6	107	83
February	35	19	8.3	85	107
March	37	19	7.8	83	120
April	42	22	4.9	44	111
May	49	28	3.4	20	75
June	58	34	2.3	4	22
July	68	40	0.8	0	0
August	69	40	0.9	0	0
September	62	36	2.0	4	0
October	52	30	5.1	24	2
November	38	23	9.4	64	17
December	34	19	10.6	93	48

Details may be found on the World Wide Web: http://www.ocs.orst.edu/allzone/allzone5.html

# Why Does Crater Lake Get So Much Snow?

The major weather patterns at Crater Lake National Park originate in the Pacific Ocean. Storm events originate in the north Pacific and build in strength and moisture content over the ocean. Wind patterns at these northerly latitudes move storms from the ocean to the Pacific Northwest.

Over 100 inches (250 cm) of rain falls each year on the Oregon Coast. After crossing the Coast Range, storm clouds descend into the Rogue and Willamette Valleys, dropping about 30 inches (76 cm) of rain. As storms move eastward, the high mountains of the Cascade Range push the cool, moist air to elevations over 10,000 feet (3,000 meters) in many places. As the air rises, it cools

further. Water vapor in the air condenses to form clouds, and snow crystals form within them. If there is enough moisture in the clouds, the snow begins to fall. If the temperature is warm enough, the snow melts before it reaches the ground and falls as rain.

Crater Lake, like all of the Cascade Range, is shaped by its winter snowfall. If you visit the park in summer, try to imagine 16 feet (5 meters) of snow blanketing everything. Then envision spreading phlox covering the roadsides. Without the snow, there would be no phlox, no streams, and ultimately, no Crater Lake.

#### **Snow Depth Statistics**

## Annual Snowfall, 1930-2002

